

**WE CLAIM AS OUR INVENTION:**

1. A positioning device for a diagnostic imaging system, comprising:
  - a patient support having a table adapted to receive a patient thereon which is movable between a preparation position, outside of said diagnostic imaging system, to an interior position within said diagnostic imaging system;
  - a camera having a field of view which includes at least a portion of said patient bed in said preparation position;
  - said patient bed having a position acquisition device which generates a signal indicating a position of said table;
  - a picture screen connected to said camera for displaying an image in said field of view of said camera;
  - a region selection device which interacts with said picture screen to designate a desired examination region in the image on the picture screen; and
  - a computer connected to said picture screen and to said patient bed, and receiving said signal from said position acquisition device, for automatically moving said table and said patient to a position within said diagnostic imaging system needed for obtaining an image of said examination region.
2. A positioning device as claimed in claim 1 wherein said region selection device is a computer mouse.

3. A positioning device as claimed in claim 1 wherein said picture screen is a touch screen forming said region selection device.

4. A positioning device as claimed in claim 1 wherein said region selection device also enters at least one of a scan length and a scan region associated with said examination region via said picture screen.

5. A positioning device as claimed in claim 1 further comprising a memory accessible by said computer wherein the position of said table needed for obtaining said image of said examination region is stored.

6. A positioning device as claimed in claim 1 further comprising an input unit allowing entry of image planes in advance of obtaining said image of said examination region.

7. A positioning device as claimed in claim 1 comprising at least one further camera having a field of view which is also displayable on said picture screen to allow selection of a region having at least two dimensions as said examination region.